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Rural Lines

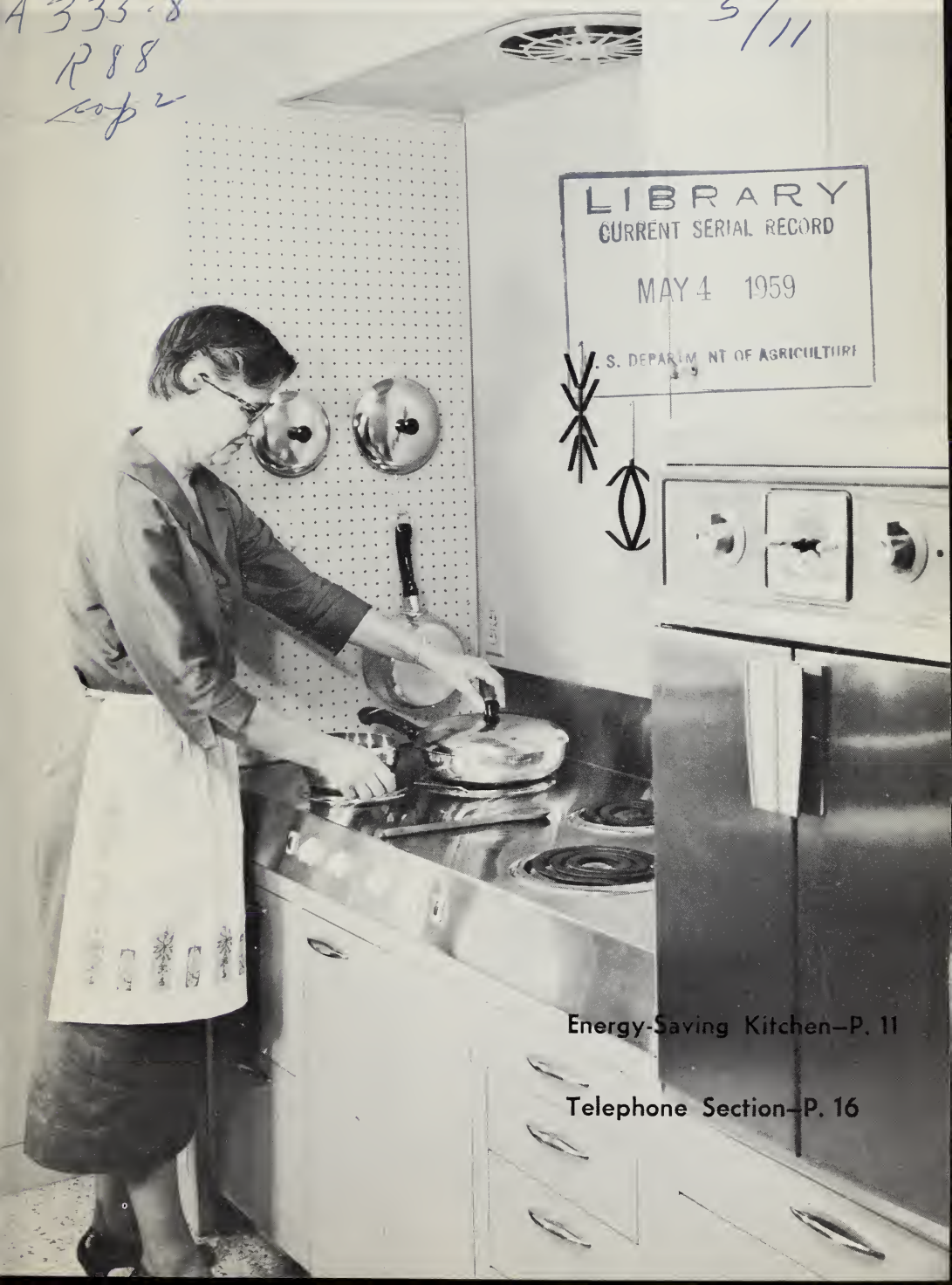
RURAL ELECTRIFICATION ADMINISTRATION • U. S. DEPARTMENT OF AGRICULTURE

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Energy-Saving Kitchen—P. 11

Telephone Section—P. 16



A Message from the

ADMINISTRATOR

Not too many years ago, we took it in our stride when the lights dimmed and flickered and finally went out in practically every thunderstorm. Sometimes they went out when there wasn't a storm. But we were tolerant and we made jokes about it.

Today it is no joking matter when the lights fail, because our water pumps quit, too, and our thermostats stop working, and several hundred dollars worth of stuff in the deep freeze starts warming up. Or the brooders get cold or we try to figure out how we're going to milk all those cows by hand. Rural consumers cannot tolerate long outages today.

That's one of the most important reasons why REA recommends to all its electric borrowers that they get started making long-range system plans, if they have not already done so. The usual city electric system has a lot of ways to limit outages when it takes out a portion of line. But the typical rural system is a radial one, without interconnecting facilities. If farmers continue to use more and more power each year—as we expect them to do—it will take careful advance planning to keep outages at a minimum while increasing the capacity of rural lines.

REA estimates that nearly 400 systems have replaced—either fully or partially—old short-range plans with long-range plans. This means that about half of the borrowers still are delaying. When we look at the way in which farmers depend on continuity of service today, we don't see how any system can afford to delay any longer.

Rural Lines

David C. Hamel

Administrator.

Cover Picture: Miss Frances Wolfe, home economist of the staff of The Institute of Home Economics, Beltsville, Maryland.

John H. Howard, Editor; Contributors to this issue: Wm. M. Baker; Fred McVey; J. Ernest Hartz; Louisan Mamer.

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DISTRIBUTORS SHOULD SET THE STANDARD

by FRED E. McVEY,
Assistant Chief, EOLD

An ambitious junior executive in Washington has a motto on his desk that reads—"My boss has 20-20 hindsight."

All of us, as we consider the general subject of electric space heating, should be able to use 20-20 foresight. Standards for safeguarding the electric heating load are necessary for a successful program. To insure that electric heating is successful, someone must assume the leadership. The electric power suppliers are the logical choice.

Electric heating equipment manufacturers who expect to be in business in future years will welcome this leadership. Also, the associated industries, manufacturers of related equipment, such as insulating material, storm doors and windows, ventilating equipment, moisture-vapor barriers, and other similar items stand to benefit from sound and stable guidance.

April 1959



Five Reasons

The Nation's electric power suppliers should guide the electric heating program for the following five reasons:

1. Satisfactory operating costs can be obtained *only* when specific standards of quality are maintained in insulating the home and installing electric heating equipment.
2. Proper insulating can substantially reduce heat loss. This results in a saving to the consumer in the cost of electric heating equipment installed.
3. It is reasonable to expect that lower installed capacity in each home will lower the overall demand on the distribution system. The load factor will be improved. In extreme cold weather, or after sudden temperature changes, excessive demands on the system will be reduced.
4. Desired operating comfort cannot be achieved and maintained where inadequate insulation results in drafts, cold floors and walls, poor humidity control, and uneven heating.
5. Comparable savings in air-conditioning costs, both to the consumer and the power supplier, can be realized when the home is insulated to meet electric heating standards. Only with adequate insulation can the full comfort of modern living be experienced.

Regardless of geographic location, the power supplier who tolerates haphazard electric heating installations opens the door to criticism. Standards must be developed specifying the amounts and quality of insulation, methods of insulation application, and other workmanship details, all of which have an effect on the heat loss of the home by both transmission and infiltration. Failure to set these standards will discourage users of electric heating.

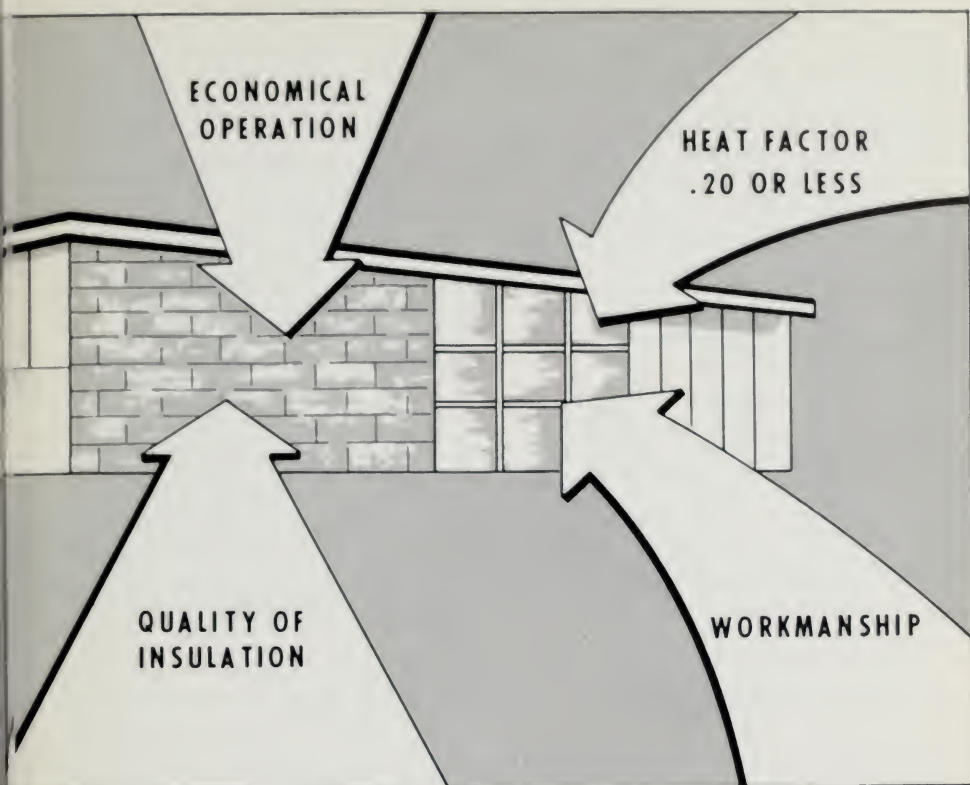


The effectiveness of insulation is closely related to its thickness, density, dryness, quality of workmanship, and the amount of heat that inherently flows through the particular insulation or insulated section. Standards developed by the industry must be specific in pointing out the minimum heat losses that can be tolerated.

To make a house ready for electric living, a competent workman must check on windows and doors, cracks and crevices, all of which add to the increased infiltration rate.

Common Denominator

What we need is a common denominator—an indicator of performance of an electrically-heated home—an indicator that is not affected by the electric retail rate, the geographical



STANDARDS SHOULD COVER THESE POINTS

location or the size of the home. This we can call the "heat factor." Briefly, it is defined by the "Heating, Ventilating and Air-Conditioning Guide" as the annual kilowatt-hours used, divided by the number of degree days, divided by the cubic feet of heated area expressed in thousands.

For example: A 1,000 square foot home with an 8-foot ceiling located in an area of 4,500 degree days, and in which the annual kilowatt-hour consumption is 9,000, would, according to this formula, have a heat factor of .25. Generally speaking, a factor greater than this would not encourage the maximum electric home heating potential.

In another recognized electric heating guide we find the example of a

small 24X24 home located in an area having 3,500 degree days and in which the estimated kilowatt-hour consumption is 5,402. This house has 7½-foot ceilings. According to the formula, we find this installation would have a factor of .35—entirely too high for the owner to enjoy the true comforts of modern electric living. This same house, if insulated to higher standards, could have a heat factor of .20 or less. The annual kilowatt-hours used would then be less than 3,000. Based on 1½-cent electricity this represents a yearly saving to the consumer of \$36. The cost of necessary extra insulation would not exceed \$125. The installed capacity could be reduced by 1½ KW representing a cash saving to the home

owner of \$50 or \$150, or approximately enough to pay for the added insulation. This \$125 in added insulation represents a 29 percent yearly saving to the home owner on his investment. In addition to this, the greatest advantage of all would be the degree of consumer comfort that would then be possible: no drafts,



even heat, warm floors, healthful humidity—and, yes, a substantial saving in both heating and air-conditioning costs.

The industry should strive for a heat factor of .20 or less. When that standard is achieved, it will pay big dividends—to the power supplier, to the insulation manufacturer, to the

consumer, and to the entire electric heating industry.

Black Eye for Electric Heating

Unfortunately, there are a few electric heating equipment manufacturers who are so eager to make a sale that they encourage and condone substandard installations.

There are also insulation manufacturers who tell prospective consumers that, in using their product, there is no need for more than 4 inches of ceiling insulation. This sales tactic invariably leaves the consumer and the power supplier in the middle. The consumer will have to pay for the mistake as long as the house stands. The power supplier, in turn, will give the consumer a monthly reminder of the mistake they allowed him to make. But, most important of all, electric heating will have a "black eye", one that will last as long as the house exists. And incidentally, another loss in the whole unfortunate business will be suffered by the insulation manufacturer, for he could have sold twice the quantity of insulation if he had used a more realistic sales approach.

If the electric industry wants to develop to the fullest extent the potential market that exists today, it must get standards to assure satisfactory performance of electric heating in the home.

KITCHEN PLANNING — Free assistance with kitchen planning, home lighting, and adequate wiring is available to members of Middle Tennessee Electric Membership Corp., Murfreesboro. Members can get help by sending a coupon contained in the co-op's monthly newsletter. They check the type of help wanted, whether their home is new or old, and fill in their name and address.

Nodak Rural Electric Cooperative, Grand Forks, N. Dak., makes this

offer in newsletter publicity: "A demonstration of kitchen planning and storage is available through Nodak by its home service director. This demonstration includes a filmstrip which is full of unique ideas for kitchen arrangements and centers. These tie in very well with all household tasks and family living. The film also shows how these centers can be altered to meet specific needs. Other subjects covered are lighting and storage in the kitchen."

THE ANOKA STORY



A co-op faces the big new problem confronting many rural systems

Like many other rural systems located “just a whoop and holler” from teeming cities, the Anoka Electric Cooperative, Anoka, Minnesota, finds itself in the midst of a boom. It also finds itself facing what can be called The Big New Problem. The BNP is becoming increasingly familiar to scores of rural systems situated, like the Anoka co-op, within reasonable commuting distance from growing cities. The BNP can be simply stated. It is no less than the problem of pleasing a new type of rural consumer—the citybred commuter family. It is also the knotty problem of making the ex-city families on the lines members of the co-op in spirit as well as name.

The Anoka co-op’s answer to The Big New Problem confronting rural systems in the path of city population spillovers is an intensive commuter-

oriented member education program. Salient features of this still evolving program include:

- Wide publicity to swell attendance at annual meetings. This includes announcements in local newspapers and the co-op’s newsletter and on radio spots. Prizes are also awarded at the meetings. “The ex-city folks just don’t come to annual meetings,” Co-op Superintendent Milton S. Olberg says. “All they want—at first, anyway — is power at a low rate.” Half of The Big New Problem, Olberg points out, can be considered as solved when the new members begin to attend annual meetings and take an active part in them.

- Demonstrations of electrical equipment and appliances.

- Informational material, including a brochure, now being prepared by the co-op, designed to familiarize

new members with the co-op's history, function, and their responsibilities as members.

The Anoka co-op plans to hire a home economist full time to help put over its member-education program. Formerly, the co-op employed a home economist part-time. She will visit homes where new electrical equipment has been installed to show the housewives how to use it. She will also conduct similar demonstrations for groups of housewives in a modernistic new kitchen that the co-op plans to build in its basement.

"It is a surprising fact," Superintendent Olberg says, "that city people

often have trouble in learning how to use equipment like electric clothes dryers and automatic washers in addition to various appliances. We know that this type of member-education pays off in member goodwill and loadbuilding."

Leon V. Barnier, manager of the co-op's member service department, underscores the fact that non-farm consumers are harder as a rule to please than farmers. "They expect more service," he says. "They are used to a definite type of service in the cities. Further they generally do not understand just what being a co-op member means."



The co-op's spacious, new headquarters building in Anoka, Minnesota.

In 1958 Barnier's member service department handled 300 special-job requests. These ranged from calls to cut overhanging tree branches to calls to replace blown fuses. The number of "panic" calls, as the co-op staff calls them, involving such things as blown fuses, has shot up with the increase of non-farm consumers on the lines, Barnier says.

Back in its first year in the late 1930s this co-op energized 313 farms; a prediction then of its present 12,000-consumer load including 2,000 "seasonals," would have

seemed fantastic. Feeding the Anoka co-op's boom is a growing population spillover from the nearby Twin Cities—mainly from Minneapolis, with a sprinkling from St. Paul. Some 6,000 new homes have been built in the Anoka area since 1949, when the co-op had 5,300 consumers. Most of the new home-owners, says Co-op Superintendent Olberg, have come from the Twin Cities, and their breadwinners commute daily to jobs in the cities.

Swelling the boom that has pushed kwh sales up about 13 percent a year

Home construction projects like this one, familiar sights in the Anoka area, prepare for the influx of city families.



for 8 years straight are a host of new industries, small businesses, schools, churches and other consumers, in addition to a rising farm consumption.

Commuter families are profoundly changing the character of the co-op's area. By 1955 non-farm consumers outnumbered farms on the co-op's lines. Toward the end of 1958, the co-op was serving 5,482 non-farm consumers to 4,000 farms. New home construction in the area has remained consistently high in recent years. In 1958, the co-op connected 836 new consumers; in 1957, 673 consumers; in 1956, 1,050 consumers. "In the next 12 months we expect to connect in the neighborhood of 1,000 new consumers," Co-op Superintendent Olberg says. "One builder plans to complete 600 to 700 homes in the area this year. Other builders will add more."

Every day newcomers move into the Anoka co-op's area. This is a postwar phenomenon that is beefing

up many rural loads across the country—the move from the cities. A recent merchandiser's survey of a typical day's input of new families into the area reported a mechanic, a truck driver, a sales co-ordinator, and a machinist moving their families from Minneapolis. A salesman from Wisconsin also moved in the area. All bought homes there. All except the salesman work in Minneapolis.

The influx of commuter families has had far-reaching side effects. Numerous service-type small businesses have sprung up to cater to the newcomers in the area. Five large elementary and junior high schools have been built within the past 5 years to cope with an additional 3,000 students. Most of these are from commuters' homes. Five new churches have also been constructed in the area in the same period.

In 1942, the co-op's peak demand was 500 kw and it sold 1,300,000 kwh. In January, 1959, the peak de-

A new member signs up. New consumer connections have averaged about 850 a year since 1956.





One of new industries, as well as the largest, that the 1950s have brought to the co-op's area.

mand reached 11,300 kw. The co-op sold 43,000,000 kwh in 1958. A factor of increasing importance as a load-builder, notably during the 1950s, has been a rising commercial and industrial consumption. In 1958, the Anoka co-op had 369 small commercial users and 41 commercial and industrial consumers that used over 25KVA capacity. The large commercial and industrial users have more than tripled their usage in recent years. In November, 1954, they used 100,000 kwh. Four years later they were using some 350,000 kwh, following a gain of 26 large commercials and industrials.

New industries that have located in the co-op's area in recent years include a national manufacturer of furnace ducts and registers with 100 workers on its payroll, and a poultry and swine research and feed concern. The co-op also serves workworking shops, a charcoal briquette maker,

Anoka clerks sort billing cards—part of 450,000 pieces of mail handled by the co-op yearly.



creameries, gravel pits, trailer courts and various other small industries.

To further increase daytime loads, the Anoka Electric Cooperative has taken steps to "sell" its operating area as a good site for industry. The co-op distributes an eye-catching brochure entitled, "Cooperating with Industry." The brochure pictures a cross-section of industries served by the co-op and cites compelling reasons why the area is a good site for industry.

Full-time farms on the co-op's line have tripled their consumption. They are small dairy farms, commercial vegetable growers, and turkey and poultry raisers. The areas of peat land in the area yield good crops of turnips, carrots, beets, parsnips, cabbages, onions and radishes. Anoka is a radish center and ships out thousands of bushels yearly. Like dairies, the vegetable growers are good load-builders. Their equipment includes cold-storage units, electric pumps, conveyors and electric heating elements to warm vegetable waxing tanks.

The always sensitive problem of outages has been sharpened by the presence on the co-op's lines of a Minneapolis-to-Duluth television relay station. In the near future, the co-op also expects to connect two more consumers which also might be termed hypersensitive to outages. These are military installations.

The co-op is geared for fast emergency action. It has a short-wave office-to-truck and truck-to-truck communications system with a unit in the headquarters building and another in Superintendent Olberg's home for a round-the-clock alert.

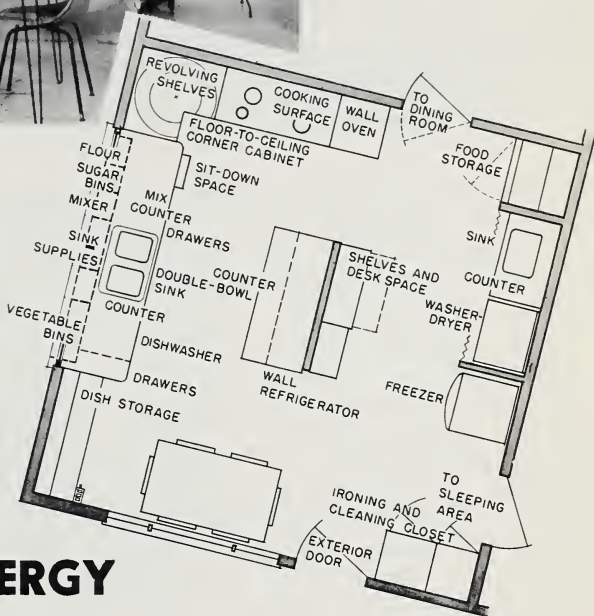
Youthful Co-op Superintendent Olberg does not foresee a slackening growth in the immediate years ahead. "There is no reason to expect less," he says. "Good reason to expect more."



*"A woman's work, grave sirs, is never done."
Laurence Eusden, 1714.*

ENERGY- SAVING KITCHEN

CAN SELL ENERGY



Good news to rural homemakers and power suppliers comes with release of plans and working drawings for an energy-saving kitchen-workroom, pictured here. In it, electric energy, substituting for human energy and time, brings its fullest benefit through good arrangement of all work centers.

Energy-saving features in this kitchen will interest any homemaker. Plans are based on research studies of energy expended by women performing household tasks and studies on space for various household activities and storage of supplies.

Step- and energy-saving kitchens can sell electric energy. Because they

benefit rural families, they can also help build good public relations for power suppliers who promote their energy-saving features.

Promotion methods might include: use of the kitchen-workroom as a headquarters demonstration center, publicity in newsletters and at meetings, aid to members remodelling or building homes, tours to spread information to other members, and cooperation with extension home agents and teachers in related activities.

Several sound plans, incorporating the latest research findings on kitchens and workrooms, come from the Institute of Home Economics of the U. S. Department of Agriculture. In

Dining Center has outlets and a pull-out center for small table appliances.



housing and household equipment research laboratories at Beltsville, Md., three farm kitchens have been planned, constructed, and displayed. All use electric equipment.

First kitchen designed and built at Beltsville was the well-known Beltsville U Kitchen, described in USDA's *A Step-Saving U Kitchen*, Home and Garden Bulletin No. 14. Second kitchen for which plans are now available is the Beltsville energy-saving kitchen-workroom. Slide films are available for both these kitchens. Helpful ideas may be found in *The Beltsville Kitchen-Workroom with Energy-Saving Features*, Home and Garden Bulletin No. 60, published in November 1958 by USDA. Third kitchen, soon to be released, includes a living area.

Single copies of bulletins on Beltsville kitchens (Home and Garden Bulletins No. 14 & 60) are available free from the Office of Information, USDA, Washington 25, D. C.; quantity supplies, at 10 cents each, from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. Detailed working drawings, which local carpenters can follow easily, are available through the extension agricultural engineer of most state agricultural colleges.

Sink Center has waste disposer, dishwasher placed to left of sit-down sink.



Mix Center provides storage in revolving corner cabinet.





Refrigerator Center contains wall refrigerator-freezer above 32-inch high base cabinet.



Laundry Center includes washer-dryer, sink and counter.

Planning Center includes clock-radio. Here Sybil Humphrey uses no-hands telephone.





WORST SAFETY RECORD SINCE 1949

Last year REA electric borrowers rang up their worst safety record since 1949. Thirty men employed by REA borrowers were killed in 1958. The cause of death of 23 of these fatality cases was electric shock.

In 1949, construction of REA-financed lines was at its peak. There were green men working on the job. Crews were working against time, in the midst of construction confusion. In 1949 accidents from falls, or from electric shock, might be expected. The job of management and supervision on a larger scale was new in 1949. In 1958, 9 years later, there was less reason for a high fatality rate on any of these scores.

In the 19-year period of 1939 through 1958, during which accurate records have been kept, there have been 443 fatal accidents to employees

of rural electric systems financed by REA. Of these, 321 were the result of electric shock. Electric shock accounted for 72.6 percent of all fatal accidents during this period. The percentage of electric shock fatalities in 1958 was 79.5 percent.

It is amazing that the most obvious and deadly hazard in the electrical utility business should claim more victims after several years of management experience. The causes are not hard to find, the experts say.

Lack of protective personal equipment is one. At least 20 of last year's 30 victims could have been saved had they worn rubber gloves. Hard hats would have saved two lives. Grounding was faulty in three cases.

Safety experts report that virtually all of last year's fatalities indicated a lack of enforcement of safety regulations and inadequate supervision. In most of them, it was apparent that there was a lack of adequate accident and first-aid reports and records upon which an effective safety program could have been based by the borrower.

BROODING INSURANCE — Several South Dakota co-ops offer a free chick brooding protection plan that insures against loss caused by power failure on co-op lines. During 1957, first year of the chick insurance program, 173,650 electrically-brooded chicks were insured for the first 10 weeks of life. These chicks represented an investment of \$80,000.

Losses due to power failure paid out by the 9 co-ops participating in the program, which was coordinated by East River Electric Power Cooperative, Madison, S. Dak., were \$89.63. The program was so popular that 319,588 chicks were insured by eleven co-ops in 1958. Only 400 were lost. Members have chicks insured by filling in and returning a form.

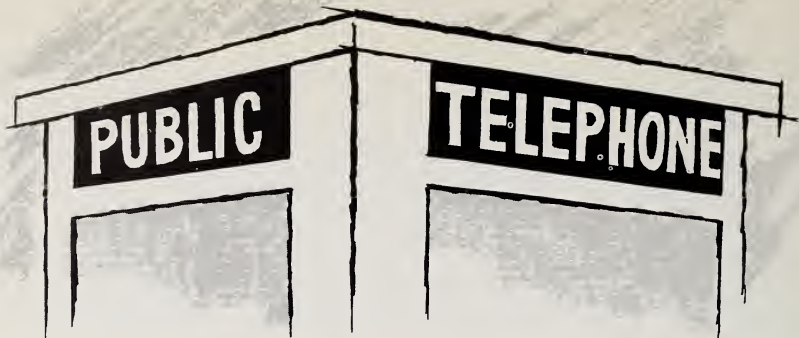
POWER USE EXCHANGE



FARM TOURS—Electric co-ops in the Midwest Farm Belt make good use of installations on members' farms to help spread usage of electric farm equipment. Maquoketa Valley Rural Electric Cooperative, Anamosa, Iowa, started its 1958 promotion of equipment—hay dryers, corn dryers, silo unloaders, milkers, milk coolers, and barn cleaners—with a dairy tour in December 1957 and wrote follow-up stories about the 7 farms toured in January and February 1958 newsletters. In August 1958, the co-op sponsored a hay drying demonstration on one of the farms visited on the tour and gave it a lot of publicity. Crow Wing Power and Light Co., Brainerd, Minn., cooperates each year in an inter-industry, inter-agency Field Day. *REA Electric Buzzer* gives good publicity to this event. First year's program in April 1957 was a tour showing 12 important farm applications. Last year's event held in July showed methods of making quality hay on one farm. Freeborn-Mower Cooperative Light and Power Association, Albert Lea, Minn., also carries on activities to promote farm use of electricity. Notable among these was participation in a Spring Barrow Show at Albert Lea, where electrical equipment for farrowing pigs was featured in an inter-industry display. Co-op and power company employees demonstrated pig brooding and other equipment useful to farmers.

WELDING CLASSES — Numerous clippings from newsletters show that co-ops assist members in choice and installation of welders and instruct them in their use. Several South Dakota co-ops hold welding schools or clinics; Lincoln-Union Electric Co., Alcester, and Codington-Clark Electric Cooperatives, Watertown, held classes one night a week for four weeks in three towns. Rosebud Electric Cooperative, Gregory, assisted with an 8-weeks welding course for veterans. Nodak Rural Electric Cooperative, Grand Forks, N. Dak., publicized an open house featuring welders and demonstrations of welding techniques. Maquoketa Valley Electric Cooperative, Anamosa, Iowa, tags welders that are of an approved type and properly installed. More than 600 tags on inspected installations show that every 12th member is using a welder to save time and money on repairs and construction of welded equipment.

HEAT IN DAIRY — "For plenty of hot water and hot air to heat milkhouse and wash milk utensils," White County Rural Electric Membership Corp., Monticello, Ind., urges dairy farmers to install a one-unit automatic electric milkhouse heater. To encourage members, the co-op furnishes free wiring materials to install 52 to 85 gallon units.



**A RURAL LINES reporter interviews J. Ernest Hartz,
of the Telephone Management Advisory Staff,
about Telephone Service for the Public.**

Q. How do telephone companies serve people when they are away from their own telephones?

A. By furnishing public paystation telephone service.

Q. Is this the same kind of service that they would get at home?

A. Fundamentally yes. But a telephone company offers only outgoing public telephone service. Every call from a public paystation must be completed to some individual subscriber's telephone. Every person must pay for service each and every time a call is completed for him from a public paystation. This is usually accomplished by equipping paystation telephone instruments with coin collecting devices and coin boxes.

Q. Is there more than one way to provide Public Telephone Service?

A. Yes. There are two ways — there is Public Telephone Service and Semi-Public Telephone Service, sometimes called Guarantee Paystation Service.

Q. What is the difference between these two services?

A. As far as the public is concerned there is no difference. Public Telephone Service is operated by the company entirely. In Semi-Public Service, incoming service is provided for the individual on whose premises the telephone is located, in addition to outgoing public service.

In the case of Public Telephone Service, the company owns, rents, or leases space, provides the booth, and hires heating, lighting, and janitor services. Its contracts in this connection occasionally allow commissions on coin box collections but no subscription to service by an individual is involved. Owners, or occupants, of the premises on which the paystation is located are the agents or vendors for the telephone company.

In the case of Semi-Public Service, the individual provides the quarters for the public paystation telephone at a location accessible to the public, provides heat and light, keeps the booth, if any, clean and guarantees minimum coin box collections for local messages. If he desires outgoing service he must use the paystation as any of the general public. The telephone is listed in the telephone directory and excepting for outgoing serv-



ice he has the same status as any other one-party business subscriber. He can advertise over his telephone number in the classified advertising section of the telephone directory. He is permitted to subscribe for an extension telephone for convenience in answering incoming calls. However, as no outgoing calls can be made, the dial is removed from the extension telephone and it must be installed to be always in full view of a patron using the paystation so that the privacy of his conversation will be assured. Does this answer your question?

Q. Yes. But there are several points I missed. Did I understand you to say that unlike semi-public paystations, straight public paystations have no telephone number? There is a public telephone in the lobby of this building, yet there is a telephone number on the dial.

A. Yes. There is a telephone number on the dial but it is unpublished.

You will not find it in the directory of subscribers. It is the number you will give to the operator when she asks for it on a toll call. It identifies the location from which you are placing your call. The station is also equipped with a ringer so that operators can signal patrons waiting at or near to a paystation to complete or report on their calls. Occasionally operators have to call back to request a patron to deposit additional coins in the box for talking over the time for which he has already paid or to get his name, address, and home telephone number to refund overpayments. The number and its location is, of course, known to the telephone company. In case of an emergency, if someone, too excited to give the number and location of the station, called in, his location would be ascertained promptly. In any case the number is "non-published". Such numbers are treated differently in the company's records and should not be confused with "non-listed" numbers which also are not published in the directory, but are treated as confidential in information records at the subscriber's request.

Q. I see. Then business concerns with Public Telephone Service on the premises obtain directory listings and classified advertising privileges by subscribing to separate individual business telephone service.

A. That is right.



Q. Did you say that both Public and Semi-Public Telephone Service should be furnished only on an individual line basis?

A. That is right. To insure privacy and to avoid conflicting traffic demands, paystations should be installed only on individual lines.

Q. You say a subscriber for Semi-Public Service guarantees payment of a minimum amount for local service. When the box is opened most of it might have been collected for toll calls. How is the separation made?

A. Toll bills are rendered for the station as they are for any of the other individual subscriber services. The amount collected is credited first to the amount of toll charges billed to the paystation and the balance is recorded as local service.

If the amount recorded as local service revenue is less than the guarantee, the difference is billed to the semi-public paystation subscriber. Commissions on the excess are usually not allowed. Spurious and mutilated coins and slugs found in the coin box are deducted before computing

receipts from local service for semi-public pay stations.

Q. How should the subject of Public Telephone Service be covered in tariffs?

A. Paystation service can frequently be expanded when tariffs are revised to include any change necessary. In the case of public paystations no subscribers are involved. There are no charges for service excepting those paid into the telephone company's paystation coin boxes by the public. The usual paystation charge for a local call is now a dime. Strangers passing through expect to pay a dime.

When public telephones are installed, the agent signs established application forms or separate contracts, depending on individual cases. The terms of such contracts usually need not be mentioned in the company's filed tariffs. Matters involving paystations occasionally brought to the attention of the Public Service Commission as pertaining to the public convenience and necessity can be resolved on the basis of the facts in the case. Tariffs can mention the fact that



TELEPHONE



no listings in the directory are allowed in connection with Public Telephone Service, and that no charges are applied to connections between paystations and the telephone company's toll operator, information clerk, repair clerk, business office, or any of its duly authorized officials; or for emergency calls to Fire and Police Departments within the local flat rate area.

In the case of Semi-Public Service, I would recommend reading Section 1510 on Telephone Tariffs in the REA Telephone Operations Manual, for further information.

Q. O.K. Now, what do you wish to say about the subject in general? Should every telephone company strive to provide adequate paystation service in its area?

A. Yes. People not only want to make calls at home but also while shopping, engaged in social, recreational, and business activities. Conveniently located paystations provide an effective means of meeting these demands at reasonable cost. Paystations increase toll revenue. Located along highways, at airports, and resorts, they bring in many dollars which might otherwise not be received by the telephone company. Also adequate public telephone service will do much to build good public relations. The public will appreciate the efforts of a company to make it easy for them to telephone.

Q. Isn't it hard to get merchants to put a paystation on their premises?

A. No, it is easy to do so. Installation of a paystation will often clear up cases of misuse of subscriber service. It is not difficult to convince a merchant that by "loaning" his telephone

he is hurting his business. Personal calls tie up his line and he loses orders and slows up service to his customers. He loses money and friends when borrowers make toll calls and fail to pay. It has been found that paystations actually stimulate business in stores in which they are located.

Q. What type telephone booths are available?

A. Paystations and booths are available in many different types, and prices. In selecting the type which will best meet your needs you should discuss the matter thoroughly with your suppliers. Coin boxes are available for nickel, dime, and two nickel or dime operation.

Q. Is prepay type equipment preferable for paystation service?

A. Generally, prepay paystation service is the most desirable in either a dial or manual exchange. It is faster, more satisfactory to both the calling and the called party, and makes efficient use of exchange facilities. However, it requires a larger investment in special central office equipment than semi-post pay or post pay equipment.

Q. What kind of coin boxes are available?

A. Paystations can be obtained with open style or sealed coin boxes. If sealed boxes are used the filled coin box closes and locks automatically as it is withdrawn from the paystation. An empty box opens automatically as it is inserted. The collector brings the filled boxes into the office for opening, counting, accounting, and billing. Machines are available to count and wrap coins and register the total amount of the collection from each box which is, of course, numbered to correspond with the paystation from which it was collected.

Q. How does one know if a paystation is feasible?

A. Read Section 1520 of the REA

Telephone Operations Manual. It discusses Paystation Feasibility.

Q. Should outdoor telephone booths be located safely well off highways?

A. Yes. A paystation could never earn enough to replace a human life.

Q. What about temporary or mobile paystation facilities?

A. If there are large outdoor events in an operating area such as county fairs, sports events, or conventions, a company may want to consider equipping a trailer with paystations for local service and with facilities for connections into the toll network.

Q. From time to time we receive discouraging reports of paystation earnings. Local people don't seem to use the telephone much when they are away from home and transients pass through on the superhighways without stopping.

A. If receipts from some paystations are disappointing, analysis of the survey results may have been faulty. Exactly what motivates people to stop and use a public telephone is not too clearly understood. Try again — and again. Experience can be gained only with action.

SELLING AIDS POPULAR

Fan mail received by the Information Services Division of REA from REA-financed telephone companies states that the merchandising aids developed by the Division to sell the rural telephone market are very successful. These selling aids are: three series of posters; telephone sales promotion packet; a do-it-yourself display kit; a handout; color movie, **TELEPHONE AND THE FARMER**; two exhibits; 10-minute tape recording for training employees; and photos for sales displays. These aids are available on request from the Information Services Division, REA.

Town on The Move



Pictures courtesy
Pollock Pioneer



New Pollock faces the future as a waterfront town on the shores of a manmade lake.

Without any fanfare or applause, The Valley Telephone Co-op of Herreid, South Dakota, is furnishing unbroken telephone service to a South Dakota town which is moving—lock, stock and barrel—to a safe place on higher ground.

Pollock (pop. 400) is the South Dakota town on the move. Its site for some 55 years was in the lowlands bordering the Missouri River. It began to uproot itself in 1955 after the site was slated to become part of the bed of the new Oahe dam reservoir.

The Oahe, near Pierre, S. D., is the largest rolled-earth dam and the second largest of the Missouri River's Federal hydro-electric power projects. The Oahe dam project is nearing completion.

Most of Pollock has already moved the country mile upland to its new site overlooking the old one. Only a lumberyard, the railway depot, a butane gas company, and a few residents

were still at the old town site early in February. They were making plans to move. At the latest, they must be gone well before 1962 or 1963 when the impounded waters of the Missouri will flood the old site.

Moving homes and other buildings, razing some and rebuilding on a new site is a big tough job at best. At such a time in a town's history, any disruption in communications can create new woes and hardships. Pollock was spared this ordeal. Pollock has had unbroken telephone service during its period of transition. Providentially, Pollock on the move got better service than it had had during most of its history. The Valley Telephone Co-op took over the Old Pollock magneto system and cut it over to dial operations shortly before the move began.

The Valley Telephone Co-op has been serving both the old and new town sites from its new dial exchange



Arthur Thorson, co-op vice president and Pollock businessman, lauds the co-op's service to the town during its move.

building, constructed on the new town site. The co-op was ready when the move began with cables that connected the new site with the old one.

"There has been no interruption in telephone service during the move," says Arthur Thorson, vice president of the co-op. Thorson speaks from personal experience. Thorson is manager of a Pollock lumber and implement company. He and Mrs. Thorson joined their neighbors in moving uphill to the new site.

"The co-op has had a big job on its hands during the move. It has had to handle the big problem of continuing telephone service for the remaining homes and businesses at the old site and it has had to meet a growing demand for service at the new town site as more and more subscribers moved up from the old site.

"All of this was accomplished without a hitch. At the outset the co-op's attitude was: 'The town needs telephone service more than ever while it is moving. It's up to us to see that the town gets that service.'"

The transplanted Pollock of today is a modern town. It has sewerage and water systems for the first time.

Pollock has gained 30 new in-

habitants since it began to move. A host of new buildings have been constructed. These include two churches, a school, a movie theatre, a grain elevator, and six business buildings. Scheduled construction will give Pollock a bank in the near future. Pollock, in transit, also gained a newspaper, the weekly Pollock Pioneer, after being without one for years.

The flooding of the Oahe dam reservoir will form a lake some 250 miles long with a shoreline of 2500 miles and covering an estimated area of about 500 square miles.

Pollock's town planning committee is preparing to publicize the attractions of the new Pollock as a resort center once the reservoir is flooded, and as a site for industry.

"We expect Pollock to become a good resort town," Co-op Vice President Thorson says. "There will be boating, fishing and hunting. People are already talking of buying lake-shore lots here—people from out of town.

"A Federal game reserve which is scheduled to be established near Pollock will also enhance the attractiveness of this area."

The Pollock exchange is one of four dial exchanges of the Valley Telephone Co-op. The others are at Glenham, Mound City, and Herreid, site of the co-op's headquarters building which is scheduled to be replaced with a new building. The new building will also house the co-op's garage. Two other dial exchanges are scheduled to be built at Hosmer and Leola.

The co-op plans to serve an estimated 1,586 subscribers over some 1,027 miles of line when programmed construction is completed.

The co-op now serves about 600 subscribers over about 485 miles of line. Sam Merkel is president of the co-op. Alton Hambricks is manager.

AT YOUR SERVICE

On the average working day, nine REA employees at various places from coast to coast are busier than cranberry merchants just before Thanksgiving. They are the central office equipment technicians who have joined the REA field staff since 1956. These technicians have been employed to directly work with owners of REA-financed telephone systems in helping them establish effective maintenance programs for central office equipment, carrier, and repeater equipment, to assure that a high quality of telephone service will be rendered to their subscribers.

These technicians have been assigned to the eight operating sections in the REA Telephone Program. Each technician reports to and works under the general direction of the section engineer. When assigned to specific work in the field on individual projects, the technician works under the general supervision of the particular field engineer in whose territory the project is located. As you can see below, each of the technicians serves borrowers over an extensive territory.

William W. Merris works out of Harrisburg, Pennsylvania, serving all of Section 8, from the eastern boundary of Illinois to the coast of Maine,

and from the Canadian border south to North Carolina. John E. Cox lives at Madison, Tennessee, covers all of Section 7. Section 6, the deep South, is served by Evan Lavinghouse, Jr., of Montgomery, Alabama. Texas, Oklahoma, and Arkansas in Section 5 are covered by Roy Head from his home at Denton, Texas. The Mid-western states in Section 4 are served by Donald J. Riney of Macon, Missouri. Glen Muller of Grand Island, Nebraska, covers Section 3 including Kansas, Nebraska, and South Dakota. The northern tier of states in Section 2 east of the Montana line are served by Douglas Thompson of Alexandria, Minnesota. The Western states in Section 1 are covered by two technicians, William S. Hills, who lives at Colorado Springs, Colorado, and George W. Holmes, whose headquarters is Billings, Montana.

These technicians are not expected to do the work of engineers, nor are they expected to maintain the owners' equipment. Rather their function is to work with the owners to assist them in developing adequate equipment maintenance programs. Specifically, they assist owners in establishing adequate maintenance routines; in the establishment of an adequate system of plant records; in the use of central office testing equipment; and in the analysis of troubles on their systems leading to further preventive maintenance measures. On occasion the technicians are requested to assist in the performance of central office equipment acceptance tests when field engineers are unable to be present for such tests.

Reports from owners throughout the country have testified to the effectiveness of this program in assisting them with their problems.

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